Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: Seabee Facility Location: 712 1st St. NW

Hampton, IA 50441-0457

Air Quality Operating Permit Number: 99-TV-046-M002

Expiration Date: September 28, 2004

EIQ Number: 92-4605

Facility File Number: 35-01-008

Responsible Official

Name: Trent Moss
Title: Plant Manager

Mailing Address: Box 457

Hampton, IA 50441-0457

Phone #: 641-456-4871 #346

Permit Contact Person for the Facility

Name: Howard Pohlman

Title: Safety & Environmental Director

Mailing Address: Box 457

Hampton, IA 50441-0457

Phone #: 641-456-4871 #313

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

1

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

Table of Contents

I.	Facility Description and Equipment List	4
II.	Plant - Wide Conditions	6
III.	Emission Point Specific Conditions.	. 12
IV.	General Conditions	. 71
	G1. Duty to Comply	
	G2. Permit Expiration	
	G3. Certification Requirement for Title V Related Documents	
	G4. Annual Compliance Certification	
	G5. Semi-Annual Monitoring Report	
	G6. Annual Fee	
	G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
	G8. Duty to Provide Information	
	G9. General Maintenance and Repair Duties	
	G10. Recordkeeping Requirements for Compliance Monitoring	
	G11. Evidence used in establishing that a violation has or is occurring	
	G12. Prevention of Accidental Release: Risk Management Plan Notification and	
	Compliance Certification	
	G13. Hazardous Release	
	G14. Excess Emissions and Excess Emissions Reporting Requirements	
	G15. Permit Deviation Reporting Requirements	
	G16. Notification Requirements for Sources That Become Subject to NSPS and HAP Regulations)
	G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
	G18. Duty to Modify a Title V Permit	
	G19. Duty to Obtain Construction Permits	
	G20. Asbestos	
	G21. Open Burning	
	G22. Acid Rain (Title IV) Emissions Allowances	
	G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
	G24. Permit Reopenings	
	G25. Permit Shield	
	G26. Severability	
	G27. Property Rights	
	G28. Transferability	
	G29. Disclaimer	
	G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	on
	G31. Prevention of Air Pollution Emergency Episodes	
	G32. Contacts List	
V. .	Appendix A 85	

Abbreviations

acfmac	etual cubic feet per minute
	andard cubic feet per minute
CFR Co	ode of Federal Regulations
°Fde	egrees Fahrenheit
EIQ en	nissions inventory questionnaire
gal/hr ga	
gr./dscf gr	ains per dry standard cubic foot
IACIo	wa Administrative Code
	wa Department of Natural Resources
MVAC m	otor vehicle air conditioner
	ew source performance standards
lb./hr po	ounds per hour
lb./MMBtupo	ounds per million British thermal units
USEPA U	nited States Environmental Protection Agency
Pollutants	

PM	particulate matter
PM ₁₀	PM with aerodynamic diameter equal to or less than 10 microns
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC	volatile organic compounds
CO	carbon monoxides
HAP	hazardous air pollutants

I. Facility Description and Equipment List

Facility Name: Seabee

Permit Number: 99-TV-046-M002

Facility Description: Hard Chromium Electroplating

Equipment List							
Emission Point Number	Associated Emission Unit(s) Number(s)	Associated Emission Unit Description					
FS1	CT1, CT2	Chrome Plating Tank					
FS2	CT3 , CT4	Chrome Plating Tank					
FS3	CT5 , CT6	Chrome Plating Tank					
FS4	CT7, CT8	Chrome Plating Tank					
FS5	CT9, CT10	Chrome Plating Tank					
FS6	CT11, CT12	Chrome Plating Tank					
FS8	CT15, CT16	Chrome Plating Tank					
FS9	CT17, CT18	Chrome Plating Tank					
FS10	CT19, CT20	Chrome Plating Tank					
FS11	CT21, CT22	Chrome Plating Tank					
FS12	CT23, CT24	Chrome Plating Tank					
FS13	CT25, CT26	Chrome Plating Tank					
FS14	CT27, CT28	Chrome Plating Tank					
FS15	CT29, CT30	Chrome Plating Tank					
PB1	PB1	Paint Booth#1					
PB2	PB2	Paint Booth #2					
DC1	PS1, PS2, PS3, PS4, PS5	Rod Polisher					
DC2	PS6, PS7, PS8	Rod Polisher					
DC4	PS11, PS12, PS13, PS14, PS15, PS16	Rod Polisher					
DC5	PS17, PS18, PS19, PS20, PS21, PS22	Rod Polisher					
PH1	PH1	Cleaning Booth					
ZV1	ZV1	Zamak Vent #1					
MS1	MS1	Parts Cleaner					
IP1	IP1	Rod Cleaner					
HT2	HT2	Hydrochloric Acid Strip Tai					

Insignificant Equipment List

Insignment Equipment List						
Insignificant Emission Unit Number	Insignificant Emission Unit Description					
<u>B1</u>	Boiler					
B2	Boiler					
В3	Boiler					
B4	Boiler					
AM1	Air Make-up					
AM2	Air Make-up					
AM3	Air Make-up					
AM4	Air Make-up					
AM5	Air Make-up					
AM6	Air Make-up					
AM7	Air Make-up					
AM8	Air Make-up					
OT1	Fuel Oil Storage Tank (5000 gal.)					
OT2	Fuel Oil Storage Tank (10,000 gal.)					
WH1	Water Heater					

II. Plant-Wide Conditions

Facility Name: Seabee

Permit Number: 99-TV-046-M002

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years Commencing on: September 29, 1999 Ending on: September 28, 2004

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Facility NESHAP Limits and Requirements

The owner or operator of this equipment shall comply with the operational limits and requirements listed below. The following applies only to the Chrome Plating tanks, Emission Points FS1 through FS15 (Emission Units CT1 through CT30).

Terms and Conditions: The permittee shall comply with all applicable requirements of 40 CFR 63 Subpart N - National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

Authority for Requirement: 40 CFR 63 Subpart N, 567 IAC 23.1(4)"n"

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Emission Limits

During tank operation, chromium emissions discharged to the atmosphere shall not exceed 0.015 milligrams of total chromium per dry standard cubic meter of ventilation air $(6.6 \times 10^{-6} \text{ gr/dscf})$. Authority for Requirement: 40 CFR 63.342(c)(1)(i)

The emission limitations apply only during tank operation, including periods of startup and shutdown, since these are routine occurrences for affected sources. The emission limitations do not apply during periods of malfunction, but the required work practice standards that address operation and maintenance must be followed during malfunctions.

Authority for Requirement: 40 CFR 63.342b)(1)

If an owner or operator is controlling a group of tanks with a common add-on air pollution control device, the emission limitations apply whenever any one affected source is operated. Authority for Requirement: 40 CFR 63.342b)(2)

Work Practice Standards:

The permittee shall meet all of the following required work and operational practices as applicable:

At all times, including periods of startup, shutdown, and malfunction, owners or operators shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices and the required operation and maintenance plan.

Authority for Requirement: 40 CFR 63.342(f)(1)(i)

Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the required operation and maintenance plan.

Authority for Requirement: 40 CFR 63.342(f)(1)(ii)

The director or the administrator may require that an owner or operator of an affected source make changes to the operation and maintenance plan if the director or the administrator finds that the plan:

- (A) Does not address a malfunction that has occurred;
- (B) Fails to provide for the operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
- (C) Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable. Authority for Requirement: 40 CFR 63.342(f)(2)

Operation and Maintenance Plan

The owner or operator shall prepare an operation and maintenance plan which includes the following elements:

- 1) The plan shall specify the operation and maintenance criteria for the affected source, the addon air pollution control device (if such a device is used to comply with the emission limits), and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment.
- 2) The plan shall incorporate the work practice standards for the packed bed scrubbers.
- 3) If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the operation and maintenance plan within 45 days after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, add-air pollution control device, or monitoring equipment and a program for corrective action for similar malfunction events.
- 4) If actions taken by the owner or operator during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the owner or operator shall

- record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter within 7 working days after the end of the event.
- 5) The owner or operator shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the director or the administrator for the life of the affected source. In addition, if the operation and maintenance plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the director or the administrator for a period of 5 years after each revision to the plan.

 Authority for Requirement: 40 CFR 63.342(f)(3)

Compliance Provisions

Composite mesh-pad systems

- 1) During the initial performance test, the owner or operator of an affected source shall determine the outlet chromium concentration and shall establish as site-specific operating parameter the pressure drop across the system, setting the value that corresponds to compliance with the applicable emission limitation. An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values, or may set as the compliant value the average pressure drop measured over the three test runs of one performance test, and accept the ±1 inch of water column from this value as the compliant range.
- 2) Once each day that an affected source is operating, the pressure drop across the mesh-pad system shall be monitored and recorded. To be in compliance, the mesh pad system shall be operated within ±1 inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant values for pressure drop established during multiple performance tests.

Authority for Requirement: 40 CFR 63.343(c)(3)

Packed-bed scrubber systems

- 1) During the initial performance test, the owner or operator of an affected source shall determine the outlet chromium concentration and shall establish as site-specific operating parameters the pressure drop across the system and the velocity pressure at the common inlet of the control device, setting the value that corresponds to compliance with the applicable emission limitation. An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values. Alternatively, the owner or operator may set as the compliant value the average pressure drop and inlet velocity pressure measured over the three test runs of one performance test, and accept the ±1 inch of water column from the pressure drop value and ±10 percent from the velocity pressure value as the compliant range.
- 2) Once each day that an affected source is operating, the velocity pressure at the inlet to the packed-bed system and the pressure drop across the scrubber system shall be monitored and recorded. To be in compliance, the scrubber system shall be operated within ±10 percent of the velocity pressure value established during the initial performance test, and within ±1

inch of water column of the pressure drop value established during the initial performance test, or within the range of compliant operating parameter values established during multiple performance tests.

Authority for Requirement: 40 CFR 63.343(c)(2)

Fume suppressants

- 1) The surface tension shall not exceed 45 dynes/cm.
- 2) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer. Once there are no exceedances for 40 hours of tank operation, measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during an additional 40 hours of operation, measurement may be conducted once every 40 hours of operation on an ongoing basis, until an exceedance occurs.
- 3) Once an exceedance occurs, or once a bath solution is drained from a coating tank and a new solution added, the original monitoring schedule of once every 4 hours must be followed, with a decrease in monitoring frequency allowed as described above.

Authority for Requirement: 40 CFR 63.343(c)(5)

Reporting and Recordkeeping Requirements:

The permittee shall maintain records specified below for a period of 5 years:

- 1) Inspection records for the add-on air pollution control device and monitoring equipment to document that the inspection and maintenance requirements have taken place.
- 2) Records of all maintenance performed on the affected source, the add-on air pollution control device, and monitoring equipment.
- 3) Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan.
- 4) Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan.
- 5) Test reports documenting results of all performance tests.
- 6) All measurements necessary to determine the conditions of performance tests.
- 7) Records of monitoring data used to demonstrate compliance with the standard, including the date and time the data are collected.
- 8) The date and time of commencement and completion of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, add-on air pollution control, or monitoring equipment.
- 9) The total process operating time of the affected source during the reporting period.
- 10) Records of the date and time that fume suppressants are added to the electroplating bath.

11) All documentation supporting the required notifications and reports.

Authority for Requirement: 40 CFR 63.346

Prohibited Activities

- 1) The permittee shall not operate any affected source in violation of the requirements of this part except under:
 - a) An extension of compliance granted by the Administrator under this part; or
 - b) An extension of compliance granted under this part by a State with an approved permit program; or
 - c) An exemption from compliance is granted by the President under section 112(i)(4) of the Clean Air Act.
- 2) The permittee shall not fail to keep records, notify, report, or revise reports as required under this part.

Authority for Requirement: 40 CFR 63.4(a)

Circumvention:

The permittee shall not build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to:

- 1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.
- 2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.
- 3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.

Authority for Requirement: 40 CFR 63.4(b)

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity

Authority for Requirement: 567 IAC 23.3(2)"d"

SO₂: 500 parts per million by volume

Authority for Requirement: 567 IAC 23.3(3)"e"

<u>Particulate Matter (state enforceable only)</u> ¹:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard

This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

cubic foot of exhaust gas, except as provided in 567 - 21.2(455B), 23.1(455B), 23.4(455B) and 567 -Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B). Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

Particulate Matter (federally enforceable)²:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed. Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

<u>Fugitive Dust:</u> Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

- 1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- 2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
- 3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
- 4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
- 5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Seabee

99-TV-046-M002: 08/06/02

² This is the current language in the Iowa SIP, and is enforceable by EPA.

III. Emission Point-Specific Conditions

Facility Name: Seabee

Permit Number: 99-TV-046-M002

Emission Point ID Number: FS1

Associated Equipment

Associated Emission Unit ID Numbers: CT1, CT2 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS1

Emissions Control Equipment Description: Packed Bed Scrubber No. 1/Suppresssnt

Applicable Requirements

Emission Units vented through this Emission Point: CT1, CT2

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%⁽¹⁾

Authority for Requirement: IDNR Construction Permit 81-A-122-S4; 567 IAC 23.3(2)"d" ⁽¹⁾ Per DNR Air Quality Policy 3-b-08, <u>Opacity Limits</u>, an exceedence of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 81-A-122-S4; 567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 81-A-122-S4; 40 CFR 63.342(c)(1)(i)

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1x10⁻³ pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 81-A-122-S4 40 CFR 63.343(c)(5)(i)

- 2) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the chevron blade mist eliminator will be inspected to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Whenever makeup water is needed, fresh makeup water will be added to the top of the packed bed. (If greater than 50% of the scrubber water is drained {e.g., for maintenance purposes} makeup water may be added to the scrubber basin.)

Authority for Requirement: 40 CFR 63.342 (for packed-bed scrubber)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber and the velocity pressure at the inlet to the control device.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 81-A-122-S4 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34	
Stack Diameter (inches): 42	
Stack Exhaust Flow Rate (scfm): 32,500	
Stack Temperature (°F): 83	
Vertical, Unobstructed Discharge Required: Yes ⊠ No [
Authority for Requirement: IDNR Construction Permit 81-A-122-5	S4

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes ⊠ No □

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS2

Associated Equipment

Associated Emission Unit ID Numbers: CT3, CT4 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS2

Emissions Control Equipment Description: Packed-Bed Fume Scrubber

Applicable Requirements

Emission Units vented through this Emission Point: CT3, CT4

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 81-A-123-S2

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: $6x10^{-6}$ gr/dscf

Authority for Requirement: IDNR Construction Permit 81-A-123-S2

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-404-S2 40 CFR 63.343(c)(5)(i)

- 2) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the chevron blade mist eliminator will be inspected to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Whenever makeup water is needed, fresh makeup water will be added to the top of the packed bed. (If greater than 50% of the scrubber water is drained {e.g., for maintenance purposes} makeup water may be added to the scrubber basin.)

Authority for Requirement: 40 CFR 63.342 (for packed-bed scrubber)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber and the velocity pressure at the inlet to the control device.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 81-A-123-S2 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34
Stack Diameter (inches): 42
Stack Exhaust Flow Rate (acfm): 32,500
Stack Temperature (°F): 83
Vertical, Unobstructed Discharge Required: Yes No Authority for Requirement: IDNR Construction Permit 81-A-123-S2

Agency Approved Operation & Maintenance Plan Required? Yes \square No \boxtimes

Facility Maintained Operation & Maintenance Plan Required? Yes 🛛 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS3

Associated Equipment

Associated Emission Unit ID Numbers: CT5, CT6 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS3

Emissions Control Equipment Description: Packed-Bed Fume Scrubber

Applicable Requirements

Emission Units vented through this Emission Point: CT5, CT6

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 89-A-054-S2

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 89-A-054-S2

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 89-A-054-S2 40 CFR 63.343(c)(5)(i)

- 2) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the chevron blade mist eliminator will be inspected to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Whenever makeup water is needed, fresh makeup water will be added to the top of the packed bed. (If greater than 50% of the scrubber water is drained {e.g., for maintenance purposes} makeup water may be added to the scrubber basin.)

Authority for Requirement: 40 CFR 63.342 (for packed-bed scrubber)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber and the velocity pressure at the inlet to the control device.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 89-A-054-S2 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34
Stack Diameter (inches): 46
Stack Exhaust Flow Rate (acfm): 32,500
Stack Temperature (°F): 83
Vertical, Unobstructed Discharge Required: Yes No
Authority for Requirement: IDNR Construction Permit 89-A-054-S2

Agency Approved Operation & Maintenance Plan Required? Yes \square No \boxtimes

Facility Maintained Operation & Maintenance Plan Required? Yes 🛛 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS4

Associated Equipment

Associated Emission Unit ID Numbers: CT7, CT8 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS4

Emissions Control Equipment Description: Packed-Bed Fume Scrubber

Applicable Requirements

Emission Units vented through this Emission Point: CT7, CT8

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 90-A-120-S2

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 90-A-120-S2

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 90-A-120-S2 40 CFR 63.343(c)(5)(i)

- 2) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the chevron blade mist eliminator will be inspected to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Whenever makeup water is needed, fresh makeup water will be added to the top of the packed bed. (If greater than 50% of the scrubber water is drained {e.g., for maintenance purposes} makeup water may be added to the scrubber basin.)

Authority for Requirement: 40 CFR 63.342 (for packed-bed scrubber)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber and the velocity pressure at the inlet to the control device.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 90-A-120-S2 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34
Stack Diameter (inches): 46
Stack Exhaust Flow Rate (acfm): 32,500
Stack Temperature (°F): 83
Vertical, Unobstructed Discharge Required: Yes No Authority for Requirement: IDNR Construction Permit 90-A-120-S2

Agency Approved Operation & Maintenance Plan Required? Yes \square No \boxtimes

Facility Maintained Operation & Maintenance Plan Required? Yes 🛛 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS5

Associated Equipment

Associated Emission Unit ID Numbers: CT9, CT10 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant System

Emissions Control Equipment ID Number: FS5

Emissions Control Equipment Description: Fume Scrubber (dry), Composite Mesh Pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT9, CT10

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%⁽¹⁾

Authority for Requirement: IDNR Construction Permit 92-A-053-S2

567 IAC 23.3(2)"d"

(1)Per DNR Air Quality Policy 3-b-08, <u>Opacity Limits</u>, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 92-A-053-S2

567 IAC 23.4(13)

Pollutant : Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 92-A-053-S2

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 92-A-053-S2 40 CFR 63.343(c)(5)(i)

- 2) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the chevron blade mist eliminator will be inspected to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Whenever makeup water is needed, fresh makeup water will be added to the top of the packed bed. (If greater than 50% of the scrubber water is drained {e.g., for maintenance purposes} makeup water may be added to the scrubber basin.)

Authority for Requirement: 40 CFR 63.342 (for packed-bed scrubber) Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber and the velocity pressure at the inlet to the control device.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 92-A-053-S2 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be	connected to t	the stack designated belo	w.
Stack Height (feet):	38		

Stack Height (feet): 38 Stack Diameter (inches): 48

Stack Exhaust Flow Rate (scfm): 32,500 Stack Temperature (°F): Ambient

Vertical Discharge Required: Yes ⊠ No □

Authority for Requirement: IDNR Construction Permit 92-A-053-S2

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a construction permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Y	Yes No No
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗆

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: FS6

Associated Equipment

Associated Emission Unit ID Numbers: CT11, CT 12 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant System

Emissions Control Equipment ID Number: FS6

Emissions Control Equipment Description: Fume Scrubber (dry), Composite Mesh Pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT11, CT12

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%⁽¹⁾

Authority for Requirement: IDNR Construction Permit 92-A-054-S2

567 IAC 23.3(2)"d"

(1)Per DNR Air Quality Policy 3-b-08, <u>Opacity Limits</u>, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 92-A-054-S2

567 IAC 23.4(13)

Pollutant : Chromium

Emission Limits: $6x10^{-6}$ gr/dscf

Authority for Requirement: IDNR Construction Permit 92-A-054-S2

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 92-A-054-S2 40 CFR 63.343(c)(5)(i)

- 2) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the chevron blade mist eliminator will be inspected to ensure that it is dry and there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Whenever makeup water is needed, fresh makeup water will be added to the top of the packed bed. (If greater than 50% of the scrubber water is drained {e.g., for maintenance purposes} makeup water may be added to the scrubber basin.)

Authority for Requirement: 40 CFR 63.342 (for packed-bed scrubber)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber and the velocity pressure at the inlet to the control device.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 92-A-054-S2 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

Stack Height (feet): 38	
Stack Diameter (inches): 48	
Stack Exhaust Flow Rate (scfm): 32,500	
Stack Temperature (°F): Ambient	
Vertical Discharge Required: Yes ⊠	No 🗌
Authority for Requirement: IDNR Constructi	on Permit 92-A-054-S2

The source shall be connected to the stack designated below.

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No No													
Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌													
		_		_					_				

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS8

Associated Equipment

Associated Emission Unit ID Numbers: CT15, CT16 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS8

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT15, CT16

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-448-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: $6x10^{-6}$ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-448-S1

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-448-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-448-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-448-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-448-S1

Agency Approved Operation & Maintenance Plan Required? Yes \sum No \subseteq

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: FS9

Associated Equipment

Associated Emission Unit ID Numbers: CT17, CT18 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS9

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT17, CT18

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-449-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-449-S1

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-449-S1 40 CFR 63.343(c)(5)(i)

- 2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-449-S1
- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-449-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-449-S1

Agency Approved Operation & Maintenance Plan Required? Yes \sum No \subseteq

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: FS10

Associated Equipment

Associated Emission Unit ID Numbers: CT19, CT20 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS10

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT19, CT20

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-515-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-515-S1

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-515-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-515-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-515-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

1 ne	source	snau	be c	onnecte	a to	tne	stack	aesignatea	below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-515-S1

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS11

Associated Equipment

Associated Emission Unit ID Numbers: CT21, CT22 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS11

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT21, CT22

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-516-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-516-S1

40 CFR 63.342(c)(1)(i)

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-516-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-516-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-516-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-516-S1

Agency Approved Operation & Maintenance Plan Required? Yes
No

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: FS12

Associated Equipment

Associated Emission Unit ID Numbers: CT23, CT24 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS12

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT23, CT24

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-517-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-517-S1

40 CFR 63.342(c)(1)(i)

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-517-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-517-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-517-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-517-S1

Agency Approved Operation & Maintenance Plan Required? Yes \sum No \subseteq

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: FS13

Associated Equipment

Associated Emission Unit ID Numbers: CT25, CT26 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS13

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT25, CT26

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-518-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-518-S1

40 CFR 63.342(c)(1)(i)

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-518-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-518-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-518-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-518-S1

Agency Approved Operation & Maintenance Plan Required? Yes \sum No \subseteq

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: FS14

Associated Equipment

Associated Emission Unit ID Numbers: CT27, CT28 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS14

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT27, CT28

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-519-S1

567 IAC 23.4(13)

Pollutant : Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-519-S1

40 CFR 63.342(c)(1)(i)

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-519-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-519-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-519-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source	shall be	connected	to the	stack a	lesignated	below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-519-S1

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b" 40 CFR 63.342(f)(3)

Emission Point ID Number: FS15

Associated Equipment

Associated Emission Unit ID Numbers: CT29, CT30 Emissions Control Equipment ID Number: MS1

Emissions Control Equipment Description: Mist Suppressant

Emissions Control Equipment ID Number: FS15

Emissions Control Equipment Description: Composite Mesh-pad System

Applicable Requirements

Emission Units vented through this Emission Point: CT29, CT30

Emission Unit Description: Chrome Plating Tank

Raw Material/Fuel: M&T HEEF (R) 25 RS (Chromium Trioxide Solution)

Rated Capacity: 0.0009 lb./hr each emission unit

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limits: 0.01 gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-520-S1

567 IAC 23.4(13)

Pollutant: Chromium

Emission Limits: 6x10⁻⁶ gr/dscf

Authority for Requirement: IDNR Construction Permit 94-A-520-S1

40 CFR 63.342(c)(1)(i)

Operational Limits and Requirements:

The owner or operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:

1) Each chromium anodizing tank must have a surface tension of no greater than 45 dynes/centimeter (3.1×10^{-3}) pounds (of force)/foot).

Authority for Requirement: IDNR Construction Permit 94-A-520-S1 40 CFR 63.343(c)(5)(i)

2) Each tank shall be equipped with a 10,000 Amp rectifier. Authority for Requirement: IDNR Construction Permit 94-A-520-S1

- 3) The following inspections will be conducted quarterly:
 - a) The device will be visually inspected to ensure there is proper drainage, no chromic acid buildup on the packed beds, and no evidence of chemical attack on the structural integrity of the device.
 - b) The back portion of the mesh pad closest to the fan will be inspected to ensure that there is no breakthrough of chromic acid mist.
 - c) The ductwork will be inspected visually from tank to the control device to ensure there are no leaks.
 - d) Washdown of the composite mesh-pads will be performed in accordance with the manufacturer's recommendations.

Authority for Requirement: 40 CFR 63.342 (for composite mesh-pad systems)

Reporting & Record keeping:

All records, as required below, shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be kept on site for at least five years and shall be available for inspection by the Department. Records shall be maintained in a legible and orderly manner and shall indicate the following:

- 1) Daily records on hours of operation.
- 2) Daily records shall be kept on the pressure drop across the scrubber.
- 3) Surface tension will be monitored every 4 hours during operation of the tank and if no exceedances after 40 hours, monitoring will be conducted every 8 hours. If there are no exceedances after the next 40 hours, surface tension will be monitored every 40 hours.
 - a) The surface tension shall be measured once every 4 hours during operation of the tank with a stalagmometer or a tensiometer.
 - b) Once an exceedance occurs as indicated through surface tension monitoring, the original monitoring schedule of once every 4 hours must be a resumed. A subsequent decrease in frequency shall follow the above schedule.
 - c) Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed according to the above schedule.
 - d) Results of the inspections required according to Work Practice Standards will be recorded.

Authority for Requirement: IDNR Construction Permit 94-A-520-S1 40 CFR 63.343

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below.

Stack Height (feet): 34.83 Stack Diameter (inches): 36

Stack Exhaust Flow Rate (acfm): 32,500

Stack Temperature (°F): 83

Vertical, Unobstructed Discharge Required: Yes ⊠ No ☐ Authority for Requirement: IDNR Construction Permit 94-A-520-S1

Agency Approved Operation & Maintenance Plan Required? Yes
No

Facility Maintained Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for the life of the affected source. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

40 CFR 63.342(f)(3)

Emission Point ID Number: PB1

Associated Equipment

Associated Emission Unit ID Number: PB1 Emissions Control Equipment ID Number: PBF1

Emissions Control Equipment Description: Paint Arrestors

Applicable Requirements

Emission Unit vented through this Emission Point: PB1

Emission Unit Description: Paint Booth Raw Material/Fuel: Paint, MAK, Toluene

Rated Capacity: 13.0 gal/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%⁽¹⁾

Authority for Requirement: 567 IAC 23.3(2)"d"; IDNR Construction Permit 92-A-024-S1

(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If the exceedance continues after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant : Particulate Matter Emission Limit: 0.01 gr/dscf

Authority for Requirement: 567 IAC 23.4(13); IDNR Construction Permit 92-A-024-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

- 1) The quantity of spray material shall not exceed 3250 gallons per twelve-month rolling total.
- 2) The VOC content of any spray material shall not exceed 8.0 lb/gallon.
- 3) The paint booth is limited to operating no more then one spray gun at one time.
- 4) The paint arrestor shall be maintained and replaced according to manufacturer's instructions and specifications.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- 1) Record the quantity of spray material used per twelve-month rolling total.
- 2) Maintain MSDS sheets of all spray materials used.
- 3) Maintain manufacturer's specifications on any spray gun used in this booth.
- 4) Maintain a record of maintenance and replacement of the paint arrestor.

Authority for Requirement: IDNR Construction Permit 92-A-024-S1

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be ducted to the existing stack detailed below.

Stack Height (feet): 14 Stack Diameter (inches): 42

Stack Exhaust Flow Rate (scfm): 20,000

Stack Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: IDNR Construction Permit 92-A-024-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Requi	ired?	Yes [□ No ⊠
Facility Maintained Operation & Maintenance Plan Reg	uired'	? Yes	⊠ No □

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: PB2

Associated Equipment

Associated Emission Unit ID Number: PB2

Emissions Control Equipment ID Number: CE PBF2 Emissions Control Equipment Description: Dry Filter

Applicable Requirements

Emission Unit vented through this Emission Point: PB2

Emission Unit Description: Paint Booth Raw Material/Fuel: Primer Paint, Toluene

Rated Capacity: 13.0 gal/hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limit: 0.01 gr/dscf

Authority for Requirement: 567 IAC 23.4(13)

IDNR Construction Permit 81-A-121

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter 1st Stack Test to be Completed by - 9/29/2001 Test Method - Iowa Compliance Sampling Method Authority for Requirement - 567 IAC 22.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Y	Yes □ No ⊠
Facility Maintained Operation & Maintenance Plan Required?	Yes ⊠ No □

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: DC1

Associated Equipment

Associated Emission Unit ID Numbers: PS1, PS2, PS3, PS4, PS5

Emissions Control Equipment ID Numbers: CC1, CC2, CC3, CC4, CC5, CC6, BH1

Emissions Control Equipment Description: 6 cyclones, 1 baghouse

Applicable Requirements

Emission Units vented through this Emission Point: PS1, PS2, PS3, PS4, PS5

Emission Unit Description: Chrome Polishers Raw Material/Fuel: Chrome plated rods

Rated Capacity: 0.5 tons/hr each

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant : Particulate Matter Emission Limit: 0.05 gr/dscf

Authority for Requirement: 567 IAC 23.4(6)

IDNR Construction Permit 90-A-244

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Agency Approved Operation & Maintenance Plan Required?	Yes [□ No ⊠
Facility Maintained Operation & Maintenance Plan Required	? Yes	□ No ⊠

Emission Point ID Number: DC2 (Fugitive) Associated Equipment Associated Emission Unit ID Numbers: PS6, PS7, PS8 Emissions Control Equipment ID Numbers: CC7, CC8, CC9, CC10, H1, BH2 Emissions Control Equipment Description: 4 cyclones, 1 Hepa filter, 1 baghouse **Applicable Requirements** Emission Units vented through this Emission Point: PS6, PS7, PS8 Emission Unit Description: Chrome Polishers Raw Material/Fuel: Chrome plated rods Rated Capacity: 0.5 tons/hr each Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below. Not Applicable **Compliance Plan** The owner/operator of this equipment shall comply with the applicable requirements listed below. This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner. Agency Approved Operation & Maintenance Plan Required? Yes \square No \boxtimes Facility Maintained Operation & Maintenance Plan Required? Yes \square No \boxtimes

Emission Point ID Number: DC4 (Fugitive)

Associated Equipment

Associated Emission Unit ID Numbers: PS11, PS12, PS13, PS14, PS15, PS16

Emissions Control Equipment ID Numbers: CC14, CC15, CC16, CC17, CC18, CC19, CC20,

H3, BH4

Emissions Control Equipment Description: 7 cyclones, 1 Hepa filter, 1 baghouse

Applicable Requirements

Emission Units vented through this Emission Point: PS11, PS12, PS13, PS14, PS15, PS16

Emission Unit Description: Chrome Polishers

Raw Material/Fuel: Chrome plated rods

Rated Capacity: 0.5 tons/hr each

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Not Applicable

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Agency Approved Operation & Maintenance Plan Required? Y	Yes	No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes [7 No ⊠

Emission Point ID Number: DC5 (Fugitive) Associated Equipment Associated Emission Unit ID Numbers: PS17, PS18, PS19, PS20, PS21, PS22 Emissions Control Equipment ID Numbers: CC20, CC21, CC22, CC23, CC24, CC25, CC26, H4, BH5 Emissions Control Equipment Description: 7 cyclones, 1 Hepa filter, 1 baghouse **Applicable Requirements** Emission Units vented through this Emission Point: PS6, PS6, PS8 Emission Unit Description: Chrome Polishers Raw Material/Fuel: Chrome plated rods Rated Capacity: 0.5 tons/hr each Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below. Not Applicable **Compliance Plan** The owner/operator of this equipment shall comply with the applicable requirements listed below. This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Agency Approved Operation & Maintenance Plan Required? Yes No	
Facility Maintained Operation & Maintenance Plan Required? Yes 🔲 N	(o 🖂

Emission Point ID Number: PH1

Associated Equipment

Associated Emission Unit ID Number: PH1

Applicable Requirements

Emission Unit vented through this Emission Point: PH1 Emission Unit Description: Phosphate Cleaning Booth

Raw Material/Fuel: Cleaning reagents

Rated Capacity: 0.5 lb./hr

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: VOC

Emission Limit(s): 1.3 tons/year

Authority for Requirement: IDNR Construction Permit 96-A-216-S1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

1) The total VOC emissions for the phosphate cleaning booth shall not exceed 1.3 tons per twelve-month rolling total.

Reporting & Record keeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- 1) Record the quantity of cleaning reagents used per twelve-month rolling total.
- 2) Maintain MSDS sheets for all cleaning reagents. The MSDS sheets must include information pertaining to the VOC content.
- 3) Calculate the twelve-month rolling total for VOCs (in tons).

Authority for Requirement: IDNR Construction Permit 96-A-216-S1

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The source shall be connected to the stack designated below:

Stack Height (feet): 6

Stack Dimensions (inches): 24x24 Stack Exhaust Flow Rate (scfm): 6800 Stack Temperature (°F): Ambient

Discharge Style: Vertical

Authority for Requirement: IDNR Construction Permit 96-A-216-S1

It shall be the owner's responsibility to ensure that construction conforms with the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes No No
Facility Maintained Operation & Maintenance Plan Required? Yes No No
Authority Requirements: 567 IAC 22.108(3)"b"

Emission Point ID Number: ZV1

Associated Equipment

Associated Emission Unit ID Number: ZV1

Applicable Requirements

Emission Unit vented through this Emission Point: ZV1

Emission Unit Description: Zinc Melting Pots (6)

Raw Material/Fuel: Natural Gas

Rated Capacity: 171.6 ft³/hr (Natural Gas)

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity Emission Limit: 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter Emission Limits: 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.3(2)

Pollutant: Sulfur Dioxide

Emission Limits: 500 ppmv for natural gas Authority for Requirement: 567 IAC 23.3(3)e

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

- a) Natural gas will be the only fuel combusted by the 6 zinc melting pots.
- b) A maximum of 6 zinc melting pots may be located under the ventilation hood.
- c) Only Zinc alloys may be melted in the 6 zinc melting pots.

Authority for Requirement: IDNR Construction Permit 96-A-597

Reporting & Record keeping:

The permitee of the 6 zinc melting pots must maintain on-site concise, written records which include:

- a) The MSDS or a supplier's chemical analyses of zinc alloys melted in the 6 zinc melting pots.
- b) The amount of zinc alloy melted per month and the amount of zinc alloy melted in the past 12 months. Both values are to be recorded at the end of each month.
- c) Maintenance and repairs performed on the ventilation fan.

Authority for Requirement: IDNR Construction Permit 96-A-597

Compliance Plan

The owner/operator of this equipment shall comply with the applicable requirements listed below.

This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Source Emission Characteristics

The ventilation hood above the 6 melting pots shall be connected to the stack detailed below:

Stack Height (feet): 22.66 Stack Diameter (inches): 42.25

Stack Exhaust Flow Rate (acfm): 13,630

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes No X Authority for Requirement: IDNR Construction Permit 96-A-597

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Stack Testing:

Pollutant - Particulate Matter 1st Stack Test to be Completed by - 9/29/2001 Test Method - Iowa Compliance Sampling Method Authority for Requirement - 567 IAC 22.108(3) The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒ Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Emission Point ID Number: MS1 (Fugitive) Associated Equipment Associated Emission Unit ID Number: MS1 **Applicable Requirements** Emission Unit vented through this Emission Point: MS1 Emission Unit Description: Parts Cleaner Raw Material/Fuel: Mineral Spirits Rated Capacity: 2.79 pounds Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below. None **Compliance Plan** The owner/operator of this equipment shall comply with the applicable requirements listed below. This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner. **Periodic Monitoring Requirements** The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below. Agency Approved Operation & Maintenance Plan Required? Yes No 🖂 Relevant requirements of O & M plan for this equipment: Facility Maintained Operation & Maintenance Plan Required? Yes No

Emission Point ID Number: IP1 (Fugitive)
Associated Equipment
Associated Emission Unit ID Number: IP1
Applicable Requirements
Emission Unit vented through this Emission Point: IP1 Emission Unit Description: Rod Cleaning Raw Material/Fuel: Isopropyl Alcohol Rated Capacity: 3 lb./hr
Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below.
Operational Limits & Requirements The owner/operator of this equipment shall comply with the operational limits and requirements listed below.
None
Compliance Plan The owner/operator of this equipment shall comply with the applicable requirements listed below.
This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.
Periodic Monitoring Requirements The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.
Agency Approved Operation & Maintenance Plan Required? Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🖂

Emission Point ID Number: HT2 Associated Equipment Associated Emission Unit ID Number: HT2 **Applicable Requirements** Emission Unit vented through this Emission Point: HT2 Emission Unit Description: Hydrochloric Acid Strip Tank Raw Material/Fuel: Hydrochloric Acid Rated Capacity: 0.93 lb./hr Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.) The emissions from this emission point shall not exceed the levels specified below. N/A **Compliance Plan** The owner/operator of this equipment shall comply with the applicable requirements listed below. This point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner. **Periodic Monitoring Requirements** The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below. Agency Approved Operation & Maintenance Plan Required? Yes No 🖂 Facility Maintained Operation & Maintenance Plan Required? Yes No 🖂 Authority Requirements: 567 IAC 22.108(3)"b"

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

- 1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"
- 2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h"(3)
- 3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"
- 4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)
- 5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"

G2. Permit Expiration

- 1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. 567 IAC 22.116(2)
- 2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance

at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

- 1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
- 2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
- 3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
- 4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
- 5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
- 6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
- 7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
- 8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

- 1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b"

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e"

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

- 1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
- 2. Remedy any cause of excess emissions in an expeditious manner.
- 3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
- 4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

G10. Recordkeeping Requirements for Compliance Monitoring

- 1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
- 2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.

- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
- 2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. 567 IAC 22.108(6)

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review

of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

- a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:
 - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and expected duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps being taken to remedy the excess emission.
 - vi. The steps being taken to limit the excess emission in the interim period.
- b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:
 - i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and duration of the excess emission.
 - iv. The cause of the excess emission.
 - v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
 - vi. The steps that were taken to limit the excess emission.
 - vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

- 3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The facility at the time was being properly operated;
 - c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
 - d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. 567 IAC 22.108(16)

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). 567 IAC 22.108(5)"b"

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. 567 IAC 23.1(2), 567 IAC 23.1(4)

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

- 1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
 - a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
 - b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
 - c. The changes are not modifications under any provisions of Title I of the Act and the

changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 22.110(1)
- 2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. 567 IAC 22.110(2)
- 3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)
- 4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)
- 5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. 567 IAC 22.103(2)
- 6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. 567 IAC 22.108(11)

G18. Duty to Modify a Title V Permit

- 1. Administrative Amendment.
 - a. An administrative permit amendment is a permit revision that is required to do any of the following:

- i. Correct typographical errors
- ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source:
- iii. Require more frequent monitoring or reporting by the permittee; or
- iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this

change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. 567 IAC 22.105(1)"a"(4)

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 567 IAC 22.1(1) **G20. Asbestos**

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. 567 IAC 22.108(7)

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

- a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or

termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"

- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.
 - c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)
- 4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;

- 2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act:
- 4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. 567 IAC 22.108 (18)

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. 567 IAC 22.111 (1)"d"

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer. or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau 7900 Hickman Road, Suite #1 Urbandale, IA 50322 (515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program. 567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits

EPA Region 7

Air Permits and Compliance Branch

901 N. 5th Street

Kansas City, KS 66101

(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite #1 Urbandale, IA 50322 (515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4 Manchester, IA 52057 (563) 927-2640

Field Office 3

1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177

Field Office 5

401 SW 7th Street, Suite I Des Moines, IA 50309 (515) 725-0268

Polk County Public Health Dept.

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351

Field Office 2

P.O. Box 1443 2300-15th St., SW Mason City, IA 50401 (641) 424-4073

Field Office 4

1401 Sunnyside Lane Atlantic, IA 50022 (712) 243-1934

Field Office 6

1004 W. Madison Washington, IA 52353 (319) 653-2135

Linn County Public Health Dept.

Air Pollution Control Division 501 13th St., NW Cedar Rapids, IA 52405 (319) 892-6000

APPENDIX A

DNR Air Quality Policy 3-b-08